ABSTRACT

METHOD FOR OBTAINING A CELL MODEL CAPABLE OF REPRODUCING *IN VITRO* THE METABOLIC IDIOSYNCRASY OF HUMANS

A cell model is disclosed that has a phenotypic profile, expressing at least one drug biotransformation enzyme. This model includes a cell having cytochrome reductase activity, transformed with at least one expression vector comprising a DNA sequence for a drug biotransformation enzyme. The method is based on the use of expression vectors coding for the sense and anti-sense mRNA of the Phase I and Phase II drug biotransformation enzymes showing a greatest variability in humans for transforming cells expressing cytochrome reductase activity. Such vectors can modulate (increase or decrease) the individualised expression of an enzyme without affecting the other enzymes. This cell model can reproduce in vitro the metabolic idiosyncrasy of humans. It is applicable in the study of development of new drugs, specifically in the study of metabolism, potential idiosyncratic hepatotoxicity, medicament interactions, etc., of new drugs.